Clients' Demographics and Strategies Influence on Loan Repayment during Covid-19 Pandemic: Evidence from Tanzanian Savings and Credits Cooperative Societies (SACCOS)

Joseph Magali

The Open University of Tanzania
joseph.magali@out.ac.tz

ABSTRACT

The study assessed the influence of the clients' demographics and strategies on loan repayment during the Corona Outbreak (COVID-19) in Tanzania. The study used Morogoro and Mvomero Teachers SACCOS (MMTS) as its case. The cross-sectional and explanatory designs, survey strategy and random sampling were applied to selected 98 SACCOS borrowers for the study. IBM SPSS software was used to enter the data and analysis was executed using descriptive and Ordinary Least Square (OLS) techniques. The study unveiled that COVID-19 deteriorated the loan portfolio during the pandemic. The findings further uncovered that the business owners were mostly affected by the pandemic and the majority of the borrowers repaid their loans using alternative sources of income. The regression analysis revealed that the amount of loan borrowed positively and significantly influenced the loan repayment while age, level of education and economic activity negatively and significantly influenced the loan repayment. The study concluded that during the COVID-19 pandemic the repayment of loans for Tanzanian SACCOS was not conducive because of poor repayment strategies and influence of clients' demographic factors. The study recommended policy makers to design policies that would enhance the repayment of loans for SACCOS borrowers during pandemics. The study contributed to the contingency theory by recommending borrowers' diverse loan repayment strategies during contingency situations.

Keywords: *COVID-19, Loan Repayment strategies, SACCOS, Demographic factors, Tanzania*

INTRODUCTION

This study assessed the influence of borrowers' demographic characteristics and strategy influence on loan repayment during the COVID-19 pandemic. The two variables ascertained how the individual characteristics and environmental variables of the contingency theory influenced loan repayment during COVID-19. The study considered Savings and Credits Cooperative Societies (SACCOS) as its case. It applied the contingency theory to study how demographic factors and loan repayment strategies influenced loan repayment during the COVID-19 pandemic. Fiedler (1964) asserted that individual, personality and environmental determine the performance of actions or situations. According to MonizJr (2010), the contingency theory aligns individual circumstances and environmental factors. Macharia (2016) asserted that the contingency theory comprises individual characteristics, organisational features, environmental variables and societal attributes. This study applied the individual characteristics and environmental variable which correlates with clients' demographic variables and strategy influence on loan repayment. Saparila (2019), Wenner (1995), Makorere (2014), Guyo (2013), Jote (2018) and Mot et al. (2013) asserted that environmental factors influenced loan repayment in Microfinance Institutions (MFIs). Similarly, Angaine and Waari (2014), Mirpourian et al. (2016), Mota et al. (2018) and Al-Azzam et al. (2020) recognized the influence of individual variables on loan repayment. However, the studies did not ascertain the status of influence during the contingency situation.

Concepts of SACCOS, Loan Repayment and COVID 19

SACCOS are financial cooperatives that are operated following cooperative principles. They are globally called credit unions. Under the cooperative microfinance mode, members of the cooperative financial institutions contribute the capital in form of shares and issue microcredit from the accumulated capital. Apart from micro credits and savings, SACCOS offers training, insurance and remittance services to Tanzanian citizens who were formally excluded from formal financial services (Ngowi, 2021). The management of the SACCOS is decided by the members themselves. The cooperative microfinance approach allows the board and the employees to operate the SACCOS on behalf of the clients. In Tanzania, SACCOS operate

both in rural and urban areas and they are imperative catalysts of the economy. Bwana and Mwakujonga (2013) asserted that the cooperatives including SACCOS contribute to 40% of the Tanzanian Gross Domestic Product (GDP) and employ about 40% of the secondary school graduates. Since the liberalization of financial services in the 1990s, the Government of Tanzania has recognized SACCOS as the pertinent provider of financial services for the poor and the excluded. Hence, the Government has promoted the expansion of SACCOS in the country. In July 2022, the number of SACCOS in Tanzania were 2,950 (TCDC, 2021). Loan repayment is essential for promoting the sustainability of SACCOS (Ndiege et al., 2016). Loans borrowing and repayment depend on each other. When borrowers repay their loans on time enhances the availability of loans to new borrowers. Hence, the proper repayment of loans stimulates the lending and borrowing functions in the SACCOS. The loan repayment challenge in SACCOS has been reported by various scholars (Magali & Haule, 2020; Pamuk et al., 2021; Ntoiti & Jagongo, 2021).

Lack of business management and investment skills, leniency in enforcing loan repayment regulations, poor skills in loan appraisal and lack of integrity among borrowers and employees influence negatively loan repayment in SACCOS (Karumuna & Akyoo, 2011; Magali, 2018; Haule & Magali, 2020). The Tanzania Cooperatives Development Commission (TCDC, 2020) affirmed that the Government of Tanzania deregistered 40% of SACCOS in Tanzania in 2020 because of loan none repayment problems and traceability. Magali (2018) revealed that some SACCOS in Dodoma and Morogoro Regions in Tanzania had outstanding loans of up to 99% of the disbursed loans. Karumuna and Akyoo (2011) further reported that Kibaigwa financial services and credit cooperative society was confiscated because it had outstanding loans of $610,000. Morogoro and Mvomero Teachers (MMTS) SACCOS is the largest SACCOS in Morogoro Region. It was registered on 28.09.1998 with registration number MGR 238. By December 2021, MMTS had 1,160 members (547 males and 613 females). Any employee in Morogoro and Mvomero Municipal Council is eligible to be a member of MMTS. In December 2021, the value of savings and deposits were Tanzanian Shillings (TZS) 2 billion ($867,975.1; 1 USD=2309 TZS as

December 2021) while TZS 2,234,083,884.90 ($967,387.2) loans were issued to borrowers. The SACCOS recorded a profit of TZS 71,215,363 ($30,839.31) and 64,785,427.96 ($28,057.79) in 2019 and 2020 respectively. The data from the SACCOS showed that 47 borrowers had bad loans among the 673 borrowers (MMTS, 2021). The value of bad loans was TZS 239,119,181 ($103,560) in December 2021. This was approximately 7% of all loans. For a SACCOS, this was a huge amount of funds and therefore, this study evaluated if the COVID-19 pandemic accelerated the accumulation of this amount of outstanding loans. The data from SACCOS also indicated that 50% of the borrowers had unpaid loans balance of 50% and above and 34% of them had not started repaying their loans. Therefore, it was plausible to use MMTS as a case for this study. The loan repayment in SACCOS is influenced by diverse factors including; demographic, loan and borrowers' characteristics, loan appraisal and monitoring procedures, borrowers and SACCOS' staff integrity, ICT influence and effects of social ties (Yeboah & Oduro, 2018; Katula & Kiriinya 2018; Haule & Magali, 2020; Gotifridi & Magali, 2021; Pamuk et al., 2021). The literature review discloses that pre and post-disbursement of loan training, setting the realistic rate of interest, clients' monitoring and appropriate appraisal of loans are used as the strategies used by MFIs/SACCOS to enhance loan repayment (Addae-Korankye, 2014). Most studies have assessed how the borrowers' demographic characteristics affect loan repayment (Addae-Korankye, 2014; Muthoni, 2016; Priyankara & Sumanasiri, 2019). Despite Magali and Ndohelo (2020) assessing the strategies used by Village Community Banks (VICOBA) borrowers to repay their loans in Korogwe town, Tanzania; studies are silent on how the borrowers' repayment strategies have affected loan repayment during contingency situations. Notwithstanding, the strategies proposed by Magali and Ndohelo (2020) focused on normal situations and not during contingency.

Emergency of COVID-19

According to Sweeny et al. (2020), COVID-19 firstly was reported in China in December 2019 before its spread across the globe. As of 17th December 2021, the numbers of worldwide cases were 271,963,258 and the numbers of deaths were 5,331,019. In Tanzania, the number of cases and deaths from

January 2020 to December 17, 2021, were 26,483 and 734 respectively (WHO, 2021). UNDP (2020) predicted that in Tanzania, COVID-19 was likely to affect the income of individuals and enterprises and eventually reduce the government revenue and social-economic services provisions. The effects were anticipated to be devastating for marginalized groups such as; youth, women and people with disabilities. The COVID-19 control measures that were taken included lockdown and social distancing policies in countries such as China, Kenya, Uganda and Rwanda. In Tanzania there was no lockdown. COVID-19 restrictions reduced both production and consumption and ultimately affected the growth of the economy in many countries (Zhou et al., 2020). Zhou et al. (2020) further reported that fertilizers production factories in Hubei province in China stopped production for more than one month and this limited not only the supply of agricultural inputs but also production. Different investments declined because the pandemic brought uncertainty (Zheng & Zhang, 2021). The COVID-19 outbreak increased unemployment and poverty in most countries in the world (Schwab & Zahidi, 2021).

The majority of low-income microfinance institution (MFI) clients who worked in the informal sector were highly affected by the COVID-19 pandemic than the higher-income households in India (Bhattacharya et al., 2020). Loss of jobs and payments caused by COVID-19 negatively affected the SACCOS' clients ability to save their income in East African countries (Buchenau & Cuevas, 2020). COVID-19 had negative repercussions on loan repayment too. Most clients of Vision Fund MFI reported an income decrease of 92% in Rwanda and Uganda due to the COVID-19 pandemic. The decrease in income was associated with the decrease in products/services demand. Moreover, few clients sold their assets to survive (Vision Fund, 2020). This study examined how the borrowers' demographic characteristics and strategy influenced loan repayment among SACCOS clients during the COVID-19 pandemic. Demographic analysis deepens the elaboration of phenomena or circumstances (Guillaume et al., 2014). Salleh et al. (2019) unveiled that diverse demographic factors among Islamic MFIs differentiate perceptions in their understanding of MFIs services. Hence, any intervention in MFIs should consider demographic factors. However, the study focused

only on Islamic MFIs which have different loan repayment strategies compared to conventional MFIs such as SACCOS. Nevertheless, the study did not assess how the loan repayment strategy influenced the loan repayment during the contingency situation. Therefore, the current study assessed the loan repayment strategies used by borrowers during the pandemic. The study applied the contingency theory to assess how the SACCOS borrowers had prepared to repay their loans during the contingency situations. Despite scholars such as; Shrestha (2020), Cytonn (2021), Mgema and Komba (2020) and Yeboah et al. (2021) declaring that COVID-19 has affected the provision of financial services in MFIs and SACCOS but none of the studies had assessed empirically how the COVID-19 pandemics influenced the loan repayment. Furthermore, the studies concentrated on MFI related variables and not on how borrowers' strategies promoted loan repayment during contingency situations such as COVID-19 pandemic. This was the study's motive. This study addressed the following research questions/key issues: the status of demographic variables in SACCOS during the COVID-19 pandemic, the extent of loan repayment during the COVID-19 pandemic, strategies which enhanced loan repayment during the COVID-19 pandemic, the proposed strategies which would have promoted borrowers to repay their loans during pandemic such as COVID-19 and the relationship between demographic variables, strategy and loan repayment during COVID-19.

Contingency Theory of Management and Loan Repayment during Pandemics

Fiedler (1964) initiated the Contingency Theory of Management to explain how individuals behave during the contingency. The theory contended that internal and external environmental circumstances determine the performance of a behavior or an action of an individual. The contingency theory succinctly focuses on two variables: the personality of an individual and the extent to which the individual influence, power and control affect the situation. According to Fiedler (1964), individual preference promotes him to overcome various situations. MonizJr (2010) articulated that the contingency theory balances individual preferences and situational factors. According to Macharia (2016) contingency theory is guided by four groups of variables

which are; user characteristics, organisational attribute environmental variables and societal variables. In this study, the author classified demographic variables as user variables while the strategy is congruent with environmental variables. Saparila (2019) demonstrated that age, gender, marital status, distance and experience in business positively and significantly influenced repayment of loans for MFIs in Indonesia. Wenner (1995) articulated how a riskier environment influences loan repayment for Costa Rican group lending clients. However, the study did not articulate how contingency situation influences loan repayment. Makorere (2014) asserted conducive environments facilitated loan repayment in SACCOS in Dar es Salaam and Morogoro regions in Tanzania. However, nothing was reported on how contingency situations influenced the repayment of loans. Munene and Guyo (2013) considered microfinance investment technical training as entrepreneurial environments which facilitated loan repayment and cushioned Kenyan MFI clients against capital challenges. Nevertheless, nothing was reported on how the training helped the borrowers to overcome the contingency environment. Jote (2018) stated that social and environmental circumstances may influence loan repayment. Notwithstanding, the study did not assess the influence of the two variables in a contingency situation.

Despite Mot et al. (2013) articulating that changes in the environment should be considered in devising the credit terms, the study did not articulate how the credit terms should be designed to enhance loan repayment during contingency situations. Saleem et al. (2014) confirmed that borrowers' characteristics influenced largely the loan repayment for farmers in D.I.Khan district in Pakistan. Angaine and Waari (2014) demonstrated that characteristics of individuals such as; hobbies, level of education and dependents' number influenced loan repayment of MFIs in Kenya. Nonetheless, the two studies did not disclose how the mentioned factors influenced loan repayment in the contingency situation. Mirpourian et al. (2016) comprehended that borrowers' characteristics influenced loan repayment in India. However, the study did not disclose how the situation is likely to be in a contingency state. Mota et al. (2018) unveiled that individual borrowers particularly married ones repaid their loans earlier than single borrowers in Portugal. Nevertheless, the study disclosed the situation in a

normal situation and not a contingency. Al-Azzam et al. (2020) associated individual characteristics, particularly honesty and diligence with loan repayment. However, the contribution of individual factors on loan repayment during the contingency state like COVID-19 pandemic was not covered. Therefore, despite the studies assessing how environmental and individual factors influence loan repayment, they did not ascertain how the two factors behaved during the contingency situation. This is why the study integrated the contingency theory to assess how borrowers' demographic variables influenced loan repayment during the COVID-19 pandemic. According to Zhou et al. (2017), a theoretical gap or contribution can cover the application of the variables of the theory to explain the practical situation. Therefore, this study assessed how the contingency theory variables of individual circumstances and environmental factors influenced loan repayment during the COVID-19 pandemic. The variables of the contingency theory were aligned with demographic variables and strategy influence on loan repayment during the contingencies. These variables have been applied by previous scholars to assess their influence on loan repayment during ideal situations and not during contingency.

Ajmal et al. (2021) argued that the COVID-19 pandemic resulted in a decline in goods and service consumption, stock prices and investments and production of goods. The study suggested the application of the contingency theory to overcome the situation. Arthur et al. (2013) recommended that MFIs in Uganda to use the contingency theory of management for controlling the MFIs' operational activities such as; monitoring, evaluation, budgeting and reporting. Nonetheless, nothing was reported on how the application of the contingency theory facilitated loan repayment. Ongosi and Otinga (2020) asserted that accurate financial reporting for MFIs in Kenya was a function of sufficient internal controls. Lyonga (2021) elucidated that the contingency theory cannot be properly explained if the disbursed loans are small and clients fail to align with MFI policies. However, the study did not assess how COVID-19 affected MFIs loan repayment in Cameroon. Pinz and Helmig (2015) argued that the adaptation of the new social and cultural contexts is essential for MFIs to overcome the contingency situation. However, this study did not consider the overwhelming contingency circumstances such as

COVID-19 pandemic. Muithya (2019) avowed that the contingency factors such as; internal environment, external environment, structure, size, strategy, technology and culture influence the performance of SACCOS in Kenya. Notwithstanding, the study did not analyse how the contingency situation affected loan repayment. Scholars such as Fiedler (1964), MonizJr (2010) and Macharia (2016) have argued that albeit the contingency theory is the right theory that explains the contexts occurring during the contingency state, the theory can't explain all variables which are resultants of the crisis and this is the major weakness of the contingency theory (Ahiafor, 2019). Therefore, this study applied the contingency theory because the researcher perceived that individual characteristics and existing environment influence the repayment of loans during a pandemic more than other variables of the theory. The theoretical gap/contribution of this study was to assess the extent demographic factors and strategies influenced loan repayment during the COVID-19 pandemic. The study used the contingency theory to assess the way repayment of loans behaves during the contingencies. The individual borrowers' characteristics and loan repayment strategies were used to examine how borrowers repaid their loans during the contingency circumstances.

COVID-19 Influence on Loan Repayment in MFIs

The COVID-19 pandemic accelerated the negligible asset growth for the Kenyan SACCOS between March and May 2020. The average gross loan growth rate was more negative than in the two previous years (Tanui, 2021). Zheng and Zhang (2021) found out that COVID-19 decreased all types of financial efficiencies except social one. The findings further revealed that the rate of lending mediated the efficiency and impact of COVID-19. COVID-19 in Nepal made MFIs' lending activities decline and NPL rise. As the result, the profitability of MFIs declined too (Shrestha, 2020). Unpaid leave for temporary employees due to the COVID-19 pandemic affected savings and poor performance of the SACCOS businesses and ultimately affected the loan repayment in Kenya (Cytonn, 2021). The COVID-19 restrictions limited the SACCOS members' attendance in the annual general meetings and hence affected the clients' savings, loan disbursement, loan recovery, and increased non-performing loans (Mgema & Komba, 2020). However, the study did not

assess empirically the extent to which COVID-19 affected the loan repayment performance in SACCOS. The COVID-19 pandemic denied physical contact and hence decelerated the physical collections of MFIs credits in China (Zheng & Zhang, 2021). In India, agricultural loans were seldom affected by the COVID-19 pandemic more than the other types of loans (Sangwan et al., 2021). This was catalyzed by the high demand for food during the pandemic (OECD, 2020). Since the lockdown was accompanied by business closure or insufficient sales; MFIs' activities in lockdown countries experienced more severe impacts than in countries that were not in lockdown (Dąbrowska, et al., 2020). In Ghana, COVID-19 restricted MFI's new loan disbursement, collections and repayments. Therefore, the COVID-19 pandemic prompted MFIs to reschedule repayment of loans, reduce physical loan activities and apply digital loan technologies (Yeboah et al., 2021). In Pakistan, the income of the MFIs clients declined by 90% due to the COVID-19 pandemic. Malik et al. (2020) reported that 70% of MFI borrowers failed to repay their loans in Pakistan because of the COVID-19 pandemic.

The pandemic also affected negatively the financial inclusion and final security of MFI clients in Tamil Nadu, India. Guerin et al. (2021) established that COVID-19 pandemic forced the reduction of the global mortgage loans rate from 22% to 1.75% from May 2019 to March 2020 (Svobodová & Hedvičáková, 2021). The clients of Appui au Développement Autonome (ADA) microfinance in Myanmar, Bhutan, Cape Verde, Senegal, Rwanda, El Salvador and Togo experienced a decline in income from generating activities due to COVID-19 pandemic. The situation ultimately reduced household meal intake for the clients (ADA, 2021). COVID-19 encouraged the increase of NPLs' in Bosnia and Herzegovina (Žunić et al., 2021). Tiwari and Somani (2021) revealed a positive correlation between the decrease in income during COVID-19 and Ekphathana Microfinance Institution (EMI) clients' loan delinquency in India. Fidow (2021) uncovered the significant and negative association between COVID-19 and the prevalence of small business owners' loan repayment in Eastleigh. Digital financial services by SACCOS members increased due to the prevalence of COVID-19. Scholars such as; Nichols (2020), Brown (2021) and Murshid and Murshid (2021)

reported similar instance in Michigan, Arizona and Bangladesh respectively. The assets of Imarisha Kenyan SACCOS grew from Kenyan 12.3 to 14.1 billion Shillings from 2019 to 2020 because of using digital financial services. The value of turnover also grew from Kenyan Shillings 2 to 2.14 billion and members increased from 81,227 to 102,132 (Tanui, 2021). Notwithstanding, studies that have examined the influence of COVID-19 on MFIs' financial service provision and performance, there seems to be data paucity on how COVID-19 has affected the loan repayment for MFIs' borrowers, particularly in the SACCOS. Moreover, despite the studies underscoring that COVID-19 has influenced loan repayment in MFIs; none of the studies have assessed the borrowers' loan repayment strategies during the contingency state. Therefore, this study was conducted to fulfill this gap.

Methods

This section articulates the research design, strategy and sampling procedures. The section further presents the data collection and analysis tools and techniques, variables and measurement procedures. Validity and reliability of the research instrument and consideration of the research ethical issues are also covered.

Research Design

The study applied a cross-sectional design, which allows data collection at once. This design was applied because of the time and financial limitations (Cooper & Schindler, 2014). The explanatory design was applied in order to explicate the relationship between the independent and dependent variables (Saunders et al., 2019). The survey strategy was used to facilitate the data collection. Through a survey, a researcher performed a range of activities such as; participants' recruitment, data collection and utilization of various data collection instruments including a questionnaire, checklist and interview guide (Ponto, 2015). Survey techniques aided the researcher to compose a questionnaire with closed-ended questions. The questionnaire contained the demographic and 5-Likert-like scale questions. Data for the study was collected in August 2021, almost a year after the severe COVID-19 pandemic attack. Despite the infection rate been low during data collection, a study was still useful because it enlightened the various stakeholders on how the

borrowers behaved during contingency situations. Therefore, the study recommended strategies which would have helped borrowers to repay their loans during contingencies.

Sampling Design and Procedures

The study used simple random sampling procedures to pick the respondents. The population of the study was 673 borrowers. The study targeted 120 respondents which were 17.8% of the borrowers. Bullen (2014) asserted that 10% of the population could be picked as a sample size if the total number of the population does not exceed 1000 objects.

Data Collection and Analysis Techniques

The structured questionnaires were distributed to borrowers by the SACCOS staff. The researcher intended to collect 120 questionnaires but only 103 questionnaires were returned. This was an 85.8% response rate. According to Hair et al. (2018), a researcher can be allowed to analyse data if the response rate is 30% or above. Data were also screened and checked for consistency and the presence of outliers. Seven questionnaires with incomplete information were dropped from the analysis and there were no outliers. The data were coded and entered into IBM SPSS statistics version 20. The study relied only on descriptive and multiple regression analysis.

Variables and Measurements Procedures

Table 3.1 presents the variables and measurement procedures. The Table covers the type of variables and methods used to measure the variables by previous scholars. According to Venkataramana et al. (2016), categorical variables can be transformed into dummy variables with 0 and 1 values and enhance running of regression analysis. However, in order to avoid the dummy variables trap, the number of dummy variables should not exceed the number of categories for each categorical variable. In the regression model, the number of dummy variables was 5 and the maximum categories were found in the education variable which had 5 categories; 1- primary, 2-secondary, 3-certificate, 4-Diploma, 5-Bachelor and above. Hence, the number of dummy variables did not exceed the number of categories in the

independent variables and hence the use of the dummy variables was justified (Venkataramana et al., 2016).

Table 1: Variables and Measurements

Type of Variables	Data analysis technique	Measurements	Source (s)	Sign
Marital status	Multiple regression analysis	Dummy variable 1- married; 0 borrowers with another marital status	Saleem et al.(2014)	+
Level of education	Multiple regression analysis	Dummy variable 1- secondary education; 0 other education	Saleem et al.(2014)	-
Sex	Multiple regression analysis	Dummy variable 1- male ;0 female)	Mejeha et al.(2018)	+
Age of respondent	Multiple regression analysis	Year of living	Saleem et al.(2014)	-
Experience of respondent	Multiple regression analysis	Years in MFIs	Saleem et al.(2014)	+
Number of dependents	Multiple regression analysis	Number of dependents	Saleem et al.(2014)	-
Loan Strategy	Descriptive analysis	1 Borrower had a strategy; 0 no strategy	Magali & Ndohelo (2020).	None
loan borrowed	Multiple regression analysis	Amount of loan borrowed	Mejeha et al.(2018)	+
Loan economic activity	Multiple regression analysis	Dummy variable 1- farming; 0 other activity	Saleem et al.(2014)	+
Major sources of income	Multiple regression analysis	Amount of fishing income	Acquah, &Addo, (2011	+

Source: Literature review, (2022)

Validity, Reliability and Research Ethical Issues Consideration

The questionnaire was pretested to 12 borrowers who were not respondents to prove its validity. The Cronbach alpha reliability scored a value of 0.89, which is within the recommended range (Sharma, 2016). The researcher adhered to the research ethical issues such as; anonymity, confidentiality and consent seeking. He also avoided data falsification, fabrication and plagiarism.

Results and Discussion

The following section covers the responses to the research questions. The sections explain the status of borrowers' demographic variables, loan repayment status and proposed strategies which promoted borrowers to repay their loans during COVID-19. The section also presents the findings on relationship between demographic variables, strategy and loan repayment during COVID-19.

Status of Demographic Variables in SACCOS during COVID 19 Pandemic

Bwire (2020) attested that COVID-19 affected more males than females the findings from Table 3.1 showed that 57.1% of the respondents were males while 42.9% were females. The findings indicated that majority of respondents were males, hence were more prone to COVID -19 infection than females. Chong et al. (2010) Shahriar et al. (2019) revealed that in Malaysia and Pakistan, gender differences influenced loan repayment where females were more likely to repay their loans than males. Concurrently, Muthoni (2016) approved that female SACCOS clients in Kenya had high loan repayment rates. The findings from Table 3.1 further indicates that majority (54.1%) of the respondents were married. The single and divorced marital status possessed a large proportion of the married respondents. The data show that SACCOS comprised diverse marital statuses. The married respondents were affected more by COVID-19 because if one member of the family was affected, the effects spread to the whole family (Budiartini, 2021). For avoiding none repayment threat to the whole family, Muthoni (2021) expounded that married borrowers repaid their loans earlier than that of other marital statuses. The findings from Table 3.1 showed that the majority

(32.7%) of the respondents possessed a certificate level of education. This was because primarily the MMTS SACCOS was founded to assist the primary school teachers to deal with the problem of capital access, whose majority had certificates level of education. However, the data indicated that the SACCOS had clients of different education levels. Magali (2013) demonstrated that SACCOS clients with a higher level of education were having a low loan repayment rate. Contrary, Kassegn and Endris (2021) unveiled that the education level of the borrowers positively influenced the loan repayment of the Amhara Saving and Credit MFI. Chong et al. (2010) displayed that the level of education did not influence significantly the loan repayment performance of non-bank financial institutions in Malaysia.

Table 2: Borrowers' Demographic Characteristics

Variable (s)	Frequency	Percent
Sex: Males	56	57.1
Females	42	42.9
Marital status		
Single	31	31.6
Married	53	54.1
Divorced/Separated	10	10.2
Widow/widower	4	4.1
Education level		
Primary	5	5.1
Secondary	9	9.2
Certificate	32	32.7
Diploma	25	25.5
Bachelor and above	27	27.6
Main occupation		
Agriculture	20	20.4
Livestock keeping	14	14.3
Business	32	32.7
Employment	30	30.6
Technical Work	2	2.0
Loan activity		
Agriculture	20	20.4
Business	37	37.8
Education	27	27.6
Livestock	14	14.3
Total	**98**	**100.0**

Table 3: Quantitative Demographic Variables

Variable	N	Minimum	Maximum	Mean
		Statistic	Statistic	Statistic
Age of respondents	98	20	70	39.44
Experience of respondent	98	1	23	6.22
Number of dependents	98	1	11	3.21
Loan borrowed in 2019/2020	98	88000	16000000	3286431.12
Loan repaid	98	75500	12000000	1834834.42
Monthly Repayment before COVID-19	98	20000	600000	189567.38
Monthly repayment after COVID-19	98	20000	600000	161961.65

Source: Field data, (2021)

The findings from Table 3.1 portrays that the majority (32.7%) of respondents mentioned business as their major occupation. The rest of the respondents listed down agriculture, livestock keeping, employment and technical works. The findings indicated that the majority of respondents borrowed loans for business activities. OECD (2020) postulated that the businesses which were not selling basic needs such as food were relatively more affected by the pandemic than those that sold other types of merchandise. Hence, investing loans in businesses that were not selling basic needs threatened loan repayment. During the COVID-19 pandemic, agricultural activities were not affected much in Tanzania compared to countries that experienced lockdowns and high infection rates (Marchant-Forde & Boyle, 2020; Sangwan et al., 2021). Loss of temporary employment declined the purchasing power of customers (Schwab & Zahidi, 2021). The findings from Table 3.1 showed that the number of borrowers' dependents ranged from 1-11. Having many dependents puts more pressure on basic needs provision (Yeboah & Oduro, 2018). The findings are in tandem with Abu et al. (2017) who revealed the same for small-scale enterprise borrowers in Ghana. Contrary, Muthoni (2016) revealed that the number of dependents negatively influenced loan repayment in Kenya. The findings from Table 3.1 showed that the minimum and maximum age of borrowers was 20 and 70 respectively. The data unveiled that borrowers were composed of diverse age

ranges. COVID-19 pandemic affected more people with old age (CDC, 2021). Hence, borrowers with old age used their income to cover treatment or protective expenses for themselves and their family members and this negatively influenced the loan repayment. The finding is contrary to Muthoni (2016) and Kassegn and Endris (2022) who disclosed that borrowers of older ages repaid their loans better than the youths. Notwithstanding, Chong et al. (2010) and Kosen (2013) displayed that age did not influence loan repayment. Results from Table 3.1 showed that the clients' experience in borrowing category ranged from 1 to 11 years. Experienced borrowers usually had learned how to mitigate the risks which result in non-repayment of loans than inexperienced borrowers. Muthoni (2016) advanced that the experience of MFI borrowers in business influenced loan repayment positively in Kenya. However, in the case of COVID-19 since it was a new pandemic, borrowers did not have experience on how to alleviate its effects to promote loan repayment. The loan borrowed in 2019/2020 ranged from TZS 88,000 to 16 million (1 USD=2309 TZS) while the maximum loans of TZS 12 million were repaid after the pandemic. The findings indicated that the SACCOS offered a loan to borrowers with different income. Moreover, the findings evidenced that some borrowers repaid their loans during the pandemic.

COVID-19 and Loan Repayment Status

This section explains the effects of COVID-19 on loan repayment. It articulates the extent that COVID-19 influenced Loan repayment, reasons for low loan repayment during COVID-19 pandemic, and strategies that made borrowers repay the loan during COVID-19.

Extent of Loan Repayment during the COVID-19 Pandemic

About 40.8% of the borrowers acknowledged that COVID-19 pandemic affected the repayment of their loans while 59.2% refuted it (Table 3.2). Malik et al. (2020) revealed that 70% of MFI borrowers failed to repay their loans in Pakistani during COVID-19. The findings of the current study indicated a relatively small influence of COVID-19 on loan repayment in SACCOS because Tanzania did not experience a full lockdown like other countries. Table 3.2 portrays the borrowing information of the randomly

selected borrowers from the loan portfolio of 240 borrowers. The findings confirmed that COVID-19 pandemic affected the repayment of loans in MMT SACCOS. The data in Table 3.2 present the amount of loan borrowed, the loan balance and the percentage of the loan balance. The data depicted that the amount of loan balance ranged from 16.7% to 100%. The findings further demonstrated that the quality of the loan portfolio was not convincing. The overall loan portfolio illustrates that at least 50% of the borrowers were having a loan balance of 50% and above while 34% of borrowers had a 100% loan balance. It implied that they did not start repaying their loans as required. Despite the fact that Tanzania did not experience a lockdown like the neighboring countries such as Rwanda, Uganda and Kenya, the data depicts that COVID influenced negatively the loan repayment in MMT SACCOS.

Table 4: Extent of Loan Borrowed and Repaid During COVID -19 Pandemic

S/NO	Amount Borrowed (TZS)	Loan Balance (TZS)	Loan Balance (%)
1	1,507,000	920,944.32	61.1
2	13,109,530	7,282,793.80	55.6
3	18,000,000.00	13,935,000	77.4
4	1,800,000	675,000	37.5
5	1,056,000	176,000	16.7
6	2,766,750	2,238,750	80.9
7	4,110,000	3,767,750	91.7
8	1,986,200	496,000	25.0
9	3,750,000	3,750,000	100.0
10	8,400,000	3,850,000	45.8

Source: MMTS, (2021)

Strategies that Enhanced Loans Repayment during the COVID-19 Pandemic

The borrowers mentioned a decline in the business's sales as the main reason which threatened low loan repayment during the COVID-19 pandemic. The findings in Table 3.3 indicated that using personal income to pay for COVID-19 treatment, providing monetary assistance to friends and relatives who suffered from COVID-19 and saving money to have treatment capability if a

family member or relatives would be infected by COVID-19 did not register the significant responses. The sales declined for the businesses which sold the non-basic need items because during the pandemic citizens concentrated on satisfying their basic needs. The findings concur with OECD (2020) who disclosed that purchasing food items was highly prioritized by the majority of the population in many countries during the COVID-19 pandemic. The data from Table 3.3 showed that only 40.8% agreed COVID-19 pandemic affected loan repayment.

Borrowers' Strategies that Promoted Loan Repayment during Pandemics

Findings from Table 3.3 showed that the majority (25.5%) of borrowers used alternative income as their strategy which promoted them to repay their loans during the COVID-19 pandemic. Other strategies included using the previous sources of income and reduction of family consumption and hence accumulating more savings. Nonetheless, the borrowers who were not affected did not register any strategy. The findings further indicated that reducing home consumption was attained by 22.4%. The findings were in tandem with Magali and Ndohelo (2020) who reported that VICOBA borrowers in Korogwe town had different strategies which promoted loan repayment. The strategies included concentrating on diverse businesses, and family members to accept paying the loans and paying loans from other sources. However, Magali and Ndohelo (2020) did not assess the borrowers' strategies that enhanced the repayment of loans during the contingencies. Hitherto, the findings from this study signified that a strategy of having diversified income promoted loan repayment during a pandemic such as COVID-19. Guérin et al. (2021) reported that during COVID-19 Tamil Nadu MFI clients borrowed from other sources to repay their loans. This could not have happened if they had diversified income sources which could boost the loan repayment during the period of contingency.

Table 5: COVID-19 and Loan Repayment Status

COVID-19 affected the loan repayment		
Response	**Frequency**	**Percent**
Yes	40	40.8
No	58	59.2
Total	98	100.0
Why low repayment of loans during COVID-19?		
Reduction of sales in business	26	26.5
Using personal income to pay f COVID-19 treatment	6	6.1
Providing monetary assistance to my friends and relatives who suffered from COVID-19	5	5.1
Saving money to have 19 treatment capabilities if a family member or relatives will be infected	5	5.1
Not affected	56	57.1
What strategy made you to repay loans during COVID		
I used the previous sources as COVID does not affect my loan/life	8	8.2
I repaid the loan using alternative sources of income	25	25.5
I reduced the family expenditure to increase my ability to repay the loan	9	9.2
No strategy	56	57.1
What future strategy you are proposing for repaying loans during pandemics such as COVID-19?	Frequency	Percent
Have diversified income	76	77.6
Reducing home consumption	22	22.4
Total	**98**	**100.0**

Source: Field Data, (2021)

Relationship between Demographic Variables, Strategy and Loan Repayment during COVID-19

The regression analysis was executed to establish the relationship between the independent and dependent variables. The findings from Table 3.4 revealed that the variables of the model were well specified. The testing of the multiple regression assumptions proved that the regression model did not

exhibit the problems of heteroscedasticity, multicollinearity and autocorrelation as indicated for the value of calculated versus tabulated chi-square, VIF and tolerance and Durbin Watson coefficients. The results of the analysis revealed that the amount of loan borrowed positively and significantly influenced the loan repayment while age, level of education and economic activity showed a significant and negative influence. The findings argument the repayment of loans during the COVID pandemic was not conducive for borrowers with old ages, high levels of education, and those who borrowed for business purposes (business was considered as a major loan activity and was coded as 1 while other activities were coded as 0). The findings further indicated that sex, borrowers' experience, number of dependents, Loan strategy, and major sources of income scored insignificant influence. The insignificant influence of the experience of the borrower on loan repayment during the pandemic implies that no borrower had experience on how to enhance loan repayment during the pandemic because COVID-19 was not anticipated, The findings are concurrent with Chirwa (1997) who found out the same results for Malawi farmers. Muthoni (2016) revealed that in an ideal situation, the experience of borrowers in business influenced loan repayment positively and significantly in Kenya.

Table 6 : Regression Analysis-Model Summary, ANNOVA and Coefficients

Model	R	R Square	Adjusted RS	Std. Error	Durbin-Watson
1	.927[a]	.859	.843	.19367	1.808

ANNOVA Table

Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	19.929	10	1.993	53.134	.000[b]
	Residual	3.263	87	.038		
	total	23.192	97			

Table 7: Independent Variables Coefficients

Regression variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Err	Beta			Tolerance	VIF
(Constant)	.677	.279		2.427	.017		
Marital Status	.078	.043	.079	1.813	.073	.842	1.188
Sex	-.028	.042	-.029	-1.664	.508	.868	1.153
Age	-.009	.003	-.190	-2.836	.006	.360	2.776
Experience	.004	.006	.046	1.802	.424	.503	1.989
Number of dependents	.019	.011	.088	1.715	.090	.618	1.619
Loan strategy	-.024	.021	-.050	-1.167	.246	.882	1.134
Amount of loan borrowed	.912	.045	.940	4.083	.000	.738	1.354
Loan economic activity	-.093	.047	-.092	-1.985	.050	.749	1.335
level of education	-.099	.044	-.096	-2.268	.026	.911	1.097
Major sources of income	.115	.059	.082	1.947	.055	.901	1.110

Source: Field Data, (2021)

Conclusion and Recommendations

The study established that 40.8% of the borrowers failed to repay their loans timely due to COVID-19. The pandemic deteriorated the loan portfolio where 50% of the borrowers were having large amounts of loan balances. The study divulged that most of the borrowers repaid loans using alternative sources of income. The regression analysis revealed that the amount of loan borrowed positively and significantly influenced the loan repayment while age, level of education and economic activity negatively and significantly influenced the loan repayment. The study recommended policy makers to design policies

that enhance the repayment of loans during the pandemic for SACCOS borrowers. Reduction of interest rates and extension of the loan repayment period may help to overcome the loan repayment problems during the pandemic. The study contributes to the contingency theory by suggesting flexible loan repayment strategies during contingency situations. Notwithstanding, the study had the following limitations; it used only quantitative analysis hence the mixed-methods design is suggested in future. Furthermore, upcoming studies might analyse how COVID-19 affected the execution of other financial services such as; remittance, training, insurance, savings and deposits.

REFERENCES

Abu, B.M., Domanban, P. B. & Haruna, I. (2017). *Microcredit loan repayment default among small scale enterprises: A double hurdle approach*. MPRA Paper No. 101576.

Acquah, H. D., & Addo, J. (2011). Determinants of loan repayment performance of fishermen: Empirical evidence from Ghana. Cercetări Agronomiceîn Moldova, XLIV, 4 (148) / 2011, 89-97.

ADA (2021*). Microfinance clients facing the COVID-19 Crisis: from findings to action for MFIs.* Retrieved 15 December 2021, from https://www.ada-microfinance.org/sites/default/files/inline-files/Synthesis_Microfinance%20Clients%20Facing%20the%20COVID-19%20Crisis_EN_1.pdf

Addae-Korankye, A. (2014). Causes and control of loan default/delinquency in microfinance institutions in Ghana. *American International Journal of Contemporary Research*, *4*(2), 36-45.

Ahiafor, A. (2019). *Strategies for Mitigating the effects of crisis in microfinance institutions in Ghana.* Doctoral Thesis, Walden University.

Ajmal, M.M., Khan, M. & Shad, M.K. (2021). The global economic cost of corona virus pandemic: current and future implications. *Public Administration and Policy: An Asia-Pacific Journal*, 24(3), 290-305.

Al-Azzam, M., Parmeter, C. F., & Sarangi, S. (2020). On the complex relationship between different aspects of social capital and group loan repayment. *Economic Modelling*, *90* (2020), 92–107.

Angaine, F., &Waari, D. N. (2014). Factors influencing loan repayment in Micro-Finance Institutions in Kenya. *IOSR Journal of Business and Management (IOSR-JBM)*, *16*(9), 66-72.

Arthur, S., Abanis, T., & Eliab, B. (2013). Management control system in selected microfinance institutions in central region, Uganda. *International Journal of Engineering Research & Technology*, *02*(01), 1-10.

Bhattacharya, D., Dasgupta, M., & Sharma, M. (2020). C*OVID-19 and Debt Moratorium - The Case of Microcredit.* Dvara Research, Policy Brief, September 2020. Retrieved 15 December 2021 from https:// www. dvara.com/research/wp-content/uploads/2020/09/COVID-19-and-Debt-Moratorium-The-Case-of-Microcredit.pdf

Brown, D. (2021). *How Valley credit union leaders face challenges of keeping employees, customers and money safe*. Retrieved 17 December 2021 from https://www.bizjournals.com/ phoenix/news/2021 /08/04 /credit-union-leaders-face-challenges.html

Buchenau, J., & Cuevas, C. E. (2020). *The calm before the storm? The impact of COVID-19 on cooperative financial institutions*. Retrieved 17 December 2021, from https://blogs.worldbank.org/psd/calm-storm-impact-covid-19-cooperative-financial-institutions.

Budiartini, N. N.(2021). Effect of COVID-19 related stress on marital quality during COVID-19 Pandemic. *Psychological Research and Intervention, 4*(1), 9-18.

Bullen, P. B. (2014). *How to choose a sample size (for the statistically challenged).* Retrieved from: http://www.tools4dev.org/resources/how-to-choose-a-sample-size/on 20/12/2021.

Bwire, G. M. (2020). Corona virus: *Why men are more vulnerable to covid-19 than women? SN ComprClin Med. 2020 Jun 4*:1–3. https://doi.org/10.1007/s42399-020-00341-w [Epub ahead of print

Centre for Disease Control and Prevention (CDC, 2021).*COVID-19 risks and vaccine information for older adults.* Retrieved 12/01/2021 from: https://www.cdc.gov/aging/covid19/covid19-older-adults.html

Chirwa, E. W. (1997). An econometric analysis of the determinants of agricultural credit repayment in Malawi. *African Review of Money Finance and Banking*, *1*(2), 107-122.

Chong, F., Morni, F., & Suhaimi, R. (2010). Demographic factors and repayment performance of NBFI customers in Kuching. In *International Conference on Science and Social Research (CSSR 2010)* (pp. 1340-1345). IEEE.

Cytonn, (2021). Impact of Corona Virus on SACCOs. Retrieved 17 December 2021, from https://cytonn.com/blog/article/impact-of-corona-on-SACCO's

Dąbrowska, K., Koryński, P., & Pytkowska, J.(2020). Impact of COVID-19 Pandemic on the microfinance sector in Europe: Field analysis and policy recommendations. Retrieved 15 December 2021, from https://mfc.org.pl/wp-content/uploads/2020/10/Impact-of-COVID19-on-MF-sector.pdf

Fidow, A. N.(2021). Effect of COVID-19 on loan repayment of small businesses in Kenya: A case study of Eastleigh Business community. *European Journal of Business and Strategic Management, 5*(2), 1 – 14.

Fiedler, F. (1964). A Contingency Model of Leadership Effectiveness. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology,* 1, 149-190). New York: Academic Press. https:// doi.org /10.1016/ S0065-2601(08)60051-9

Gotifridi, P., & Magali, J. (2021). Factors affecting use of mobile money services on loans repayment for saving and credits cooperative societies

(SACCOS) in Rombo district, Tanzania. *The Pan-African Journal of Business Management, 5(1),* 35-48

Guillaume, Y. R. F., Brodbeck, F. C., & Riketta, M. (2012). Surface- and deep-level dissimilarity effects on social integration and individual effectiveness related outcomes in work groups: A meta-analytic integration. *Journal of Occupational and Organisational Psychology,* 85, 80– 115. doi: 10.1111/j.2044-8325.2010.02005.x

Guérin, I., Guermond, V., Joseph, N., Natarajan, N., & Venkatasubramanian, G. (2021). COVID-19 and the unequalizing infrastructures of financial inclusion in Tamil Nadu *Development and Change, 52*(4), 927–951. https//doi.org/10.1111/dech.12674

Ha, V. D. & Dang, T. T. N.(2021). Ex Post Monitoring and Loan Repayment Performance in Rural Vietnam. *Journal of Asian Finance, Economics and Business, 8*(8), 0365–0373.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate data analysis* (8th ed.). Cengage Learning.

Haule, B., & Magali, J. (2020). The integrity factors affecting loans repayment for SACCOS in Mbeya City, Tanzania. *Ruaha Journal of Business, Economics and Management Sciences, 3*, December, 2020, 33-54.

Karumuna, L. & Akyoo, A. (2011). *Rural Finance challenges in Tanzania – The case of Kibaigwa financial services and credit cooperative society (KIFISACCOS) in Kongwa district.* Business Minds Africa, Case series, number, June 2011.

Kassegn, A., & Endris, E. (2021). Factors affecting loan repayment rate among smallholder farmers got loans from the Amhara Credit and Saving Institution: In the case of Habru District, Amhara Regional State, Ethiopia. *International Area Studies Review*. https:// doi.org/10.1177/ 22338659211040993

Jote, G. G. (2018). Determinants of loan repayment: the case of microfinance institutions in Gedeo Zone, SNNPRS, Ethiopia. *Universal Journal of Accounting and Finance, 6*(3), 108-122.

Katula, R., & Kiriinya, D. S. (2018). Loan repayment and financial performance of deposit taking savings and credit cooperative societies in Embu County, Kenya. *International Journal of Current Aspects in Finance, 4*(2), 102- 118.

Kosen, L. E. (2013). The effect of demographic characteristics on loan performance of commercial banks in Kenya. MBA Dissertation, University of Nairobi.

Lyonga, E. (2021). Using microfinance management for individual borrowers in Cameroon, Africa. *International Journal of Tourism & Hotel Business Management, 3*(3), 539-561.

Macharia, M. N (2016). *Relationship between financial management practices and financial performance of microfinance institutions in Kenya.* MBA Dissertation, University of Nairobi.

Magali, J., & Ndohelo, M. (2020). Influence of credits risk management on VICOBA's loan repayment performance in Tanzania: The Case Study of Korogwe Town. *The Accountancy and Business Review*, *12*(1 & 2). Retrieved from https://journals.iaa.ac.tz/index.php/abr/article/view/10

Magali, J. J. (2013). Factors Affecting Credit Default Risks For Rural Savings and Credits Cooperative Societies (SACCOS) in Tanzania. *European Journal of Business and Management,* 5(32), 60-73.

Magali, J. J. (2018). Comparative analysis of strengths and challenges of SACCOS, VICOBA, NGO MFIs and mobile money transactions in Tanzania. *International Journal of Management Science and Business Research, 7*(5), 1-10.

Makorere, R. F. (2014). Factors affecting loan repayment behaviour in Tanzania: Empirical evidence from Dar es Salaam and Morogoro regions. *International Journal of Development and Sustainability*, *3*(3), 481-492.

Malik, K., Meki, M., Morduch, J., Ogden, T., Quinn, S., & Said, F.(2020). *COVID-19 and the future of microfinance: Evidence and insights from Pakistan.* Retrieved 15 December 2021, from http:// simonrquinn.com/ MicrofinanceCOVID.pdf

Marchant-Forde, J. N. & Boyle. L.A. (2020). C*OVID-19 effects on livestock production: A one welfare issue*. Front. *Vet. Sci., 30* September 2020 | https://doi.org/10.3389/fvets.2020.585787

Mejeha, R. O., Bassey, A. E., &Obasi, I. O. (2018). Determinants of loan repayment by beneficiary farmers under the integrated farmers scheme in AkwaIbom State of Nigeria. *Journal of Agriculture and Food Sciences, 16*(2), 75-87.

Mgema, J. M., & Komba, C. K. (2020). Socio-economic effects of COVID-19 pandemic on the performance of co-operative societies in Tanzania. *Journal of Co-operative and Business Studies,5*(2), 29-39.

Mirpourian, S., Caragliu, A., Di Maio, G., Landoni, P., & Rusinà, E. (2016). Determinants of loan repayment performance among borrowers of microfinance institutions: Evidence from India. *World Development Perspectives, 1,* 49–52.

MonizJr, R. J. (2010). *History of managerial thought: a brief overview: in Practical and Effective Management of Libraries*. Retrieved 24 February 2022 from: https://www.sciencedirect.com/topics/economics-econometrics-and-finance/contingency-theory

Morogoro and Mvomero Teachers SACCOS (MMTS, 2021). Annual Report 2021.

Mot, H. O., Masinde, J. S., Mugenda, N. G., & Sindani, M. N. (2012). effectiveness of credit management system on loan performance: empirical evidence from micro finance sector in Kenya. *International Journal of Business, Humanities and Technology, 2*(6), 99-108.

Mota, J., Moreira, A. C., & Brandão, C. (2018). Determinants of microcredit repayment in Portugal: analysis of borrowers, loans and business projects. *Portuguese Economic Journal*, *17*(3), 141-171.

Muithya, V.K.(2019). *Internal factors affecting growth of savings and credit cooperative societies in Machakos County, Kenya*. Master Thesis, South Eastern Kenya University.

Munene, H. N., & Guyo, S. H. (2013). Factors influencing loan repayment default in micro-finance institutions: The experience of Imenti North District, Kenya. *International Journal of Applied Science and Technology, 3* (3), 80-84.

Murshid, N. S., & Murshid, N. (2021). "*Innovations" During COVID-19: Microfinance in Bangladesh*. *Affilia*. https:// doi.org/10.1177/ 08861 099 21 1054024.

Muthoni, M.P. (2016). Assessing Borrower's and business' factors causing microcredit default in Kenya: A Comparative Analysis of Microfinance Institutions and Financial Intermediaries. *Journal of Education and Practice, 7*(12), 97-118.

Ndiege, B. O., Mataba, L., Msonganzila, M. & Nzilano, K. L.(2016).The link between financial performance and loan repayment management in Tanzanian SACCOS. *African Journal of Business Management, 10*(4), 89-97.

Ngowi, S. A.(2021). Contribution of SACCOS in the growth of small enterprises: Evidence from Tujikomboe SACCOS in MoshI District, Kilimanjaro Tanzania. *Journal of Co-operative and Business Studies, 6*(1), 38-44.

Nichols, L.(2020). *Credit unions must evolve in the wake of the corona virus*. Retrieved 17 December 2021 https://www.cujournal. com/creditunions/ opinion/credit-unions-must-evolve-in-the-wake-of-the-coronavirus.

Ntoiti, R., & Jagongo, A. (2021). Non-performing loans and financial stability of deposit taking SACCOS regulated by SASRA. *International Journal of Finance and Accounting, 6*(2), 29 – 39.

OECD (2020).*Food Supply Chains and COVID-19: Impacts and Policy Lessons.* Retrieved 11 January 2022, from https://www. oecd.org/ coronavirus/policy-responses/food-supply-chains-and-covid-19-impacts-and-policy-lessons-71b57aea/

Ongosi, J. N., & Otinga, H. N. (2020). Financial management practices and financial performance of micro finance institutions in Nairobi County Kenya. The *Strategic Journal of Business & Change Management, 7* (4), 1276 – 1297.

Pamuk, H., van Asseldonk, M., Ruben, R., Kweka, T., Wattel, C. & Hella, J.P. (2021). Social ties, access to loans, and loan repayments in savings and loan associations: Evidence from rural Tanzania. *Agricultural Finance Review*, .82(5), 777-796. https://doi.org/10.1108/AFR-03-2021-0036.

Pinz, A., & Helmig, B.(2015). Success Factors of Microfinance Institutions: State of the Art and Research Agenda. *Voluntas: International Journal of Voluntary and Nonprofit Organisations,* 26(2) (488-509. .https://doi.org/10.1007/s11266-014-9445-2.

Priyankara, D. T. and Sumanasiri, E. A. G.(2019). Determinants of Microfinance Loan Default: An Empirical Investigation in Sri Lanka. *South Asian Journal of Social Studies and Economics, 4*(3), 1-13.

Roy, R., & Agarwal, V. (2020). *Millions of Indians Are Fleeing Cities, Raising Fears of a Corona virus 'Land Mine' in Villages.* Wall Street Journal, 27 May. https://www.wsj.com/ articles/indias-migrants-head-home-as-lockdown-easesprompting-fears-of-coronavirus-spread-11590579072.

Saleem, A., Jan, F. A., Khattak, R. M., &Quraishi, M. I. (2014). Impact of farm and farmers characteristics on repayment of agriculture credit. *Abasyn Journal of Social Sciences, 4*(1), 23-35.

Salleh, S.N. (2019). *Does socio-demographic variables matter in explaining issues and challenges in islamic microfinance? Evidence from Malaysia.* Retrieved25December2022,from:https://knepublishing.com/Index.php/ Kne-Social/article/view/4253/8736#content/contributor_reference_ 3.

Sangwan, S., Nayak, N.C., Sangwan, V., & Pradhan, A.K.(2021). COVID-19 pandemic: Challenges and ways forward for the Indian microfinance institutions. *J Public Affairs*. *2021;e2667*. 10.1002/pa.2667.

Saparila, W. (2019). Personal characteristics, business characteristics and lender-borrower relationship–a study on micro finance institutions of

east java, Indonesia: Does it matter in repayment performance? Eurasia: Economics & Business, 2(20), 74-81.

Schwab, K., &Zahidi, S. (2021). *How Countries are Performing on the Road to Recovery. World Economic Forum.* Retrieved 17 December 2021, from https://www.repoa.or.tz/wp-content/uploads/2021/01/WEF_The-Global-Competitiveness-Report-2020-compressed.pdf

Shahriar , A. Z. M., Unda, L. A., & Alam , Q. (2019). Gender Differences in the Repayment of Microcredit The Mediating Role of Trustworthiness, *Journal of Banking and Finance*, doi: https://doi.org /10.1016/ j.jbank fin. 2019.105685.

Sharma, B. (2016). A focus on reliability in developmental research through Cronbach's Alpha among medical, dental and paramedical professionals. *Asian Pacific Journal of Health Sciences, 3*(4), 271-278.

Shrestha, P. K.(2020). *Impact of Covid-19 on Microfinance Institutions of Nepal*. NRB Working Paper No. 51

Svobodová, L., & Hedvičáková, M.(2021). *Mortgage Loans and Impacts of the Global Pandemic COVID-19 in the Globalized Society*. SHS Web of Conferences 92, 010 (2021). https://doi.org/10.1051/shsconf /20219201047. Retrieved 16 December 2021 from https://www.shs-conferences. org/articles/ shsconf/pdf/ 2021/03/ shsco nf_ g lob20_ 010 47.pdf

Sweeny, K., Rankin, K., Cheng, X.,, Hou, L., Long, F., Meng, Y, et al. (2020). Flow in the time of COVID-19: Findings from China. *PLoS ONE, 15*(11): e0242043. https://doi.org/10.1371/journal.pone.0242043.

Tanui, N.(2021). *SACCO records growth despite Covid-19 impact.* Retrieved 17 December 2021 from https://www.standardmedia. co.ke/ business/ business/article/2001409310/sacco-records-growth-despite-covid-19-impact.

Tanzania Cooperatives Development Commission (TCDC, 2020). *Annual report*, 2019.

Tiwari, K. K. & Somani, R.(2021). How COVID-19 pandemic affecting loan Emi repayment: A study on Indian Banks. SAARJ *Journal on Banking & Insurance Research*, 10(3), 31-40.

UNDP (2020). *Rapid Socio economic impacts assessment of COVID-19 in Tanzania.* Retrieved 17 December 2021, from https:// www. undp.org/ content/dam/tanzania/docs/docs2020/undp-tz-SEA-Report%20Rapid-COVID19.pdf.

Venkataramana, M., Subbarayudu, M., Rajani, M., & Sreenivasulu, K. N. (2016). Regression analysis with categorical variables. *International Journal of Statistics and Systems*, *11*(2), 135-143.

Vision Fund (2020). *Vision Fund Africa MFI Survey on the Impact of COVID-19 on Clients.* Retrieved 17 December 2021, from https:// www.visionfund.org/stories/visionfund-africa-mfi-survey-impact-covid-19-clients

Wenner, Mark D. (1995). Group credit: A means to improve information transfer and loan repayment performance. *Journal of Development Studies, 32*(2), 263 281. doi:10.1080/00220389508422414

WHO (2021). *WHO Coronavirus (COVID-19) Dashboard*. Retrieved 20 December 2021 from https://covid19.who.int/

Yeboah, E., & Oduro, I. M. (2018). Determinants of loan defaults in some selected credit unions in Kumasi Metropolis of Ghana. *Open Journal of Business and Management, 6*, 778-795.

Yeboah, T., Antoh, E. F., & Kumi, E. (2021). *Strategic responses of microfinance institutions to the Coronavirus disease (COVID-19) crisis in Ghana, Development in Practice.* Retrieved 14/01/2021 from: https://www.tandfonline.com/doi/abs/10.1080/09614524.2021.1991890?journalCode=cdip20

Zheng, C, .& Zhang, J.(2021). The impact of COVID-19 on the efficiency of microfinance institutions. *International Review of Economics & Finance. 2021 Jan; 71*, 407–423. https//doi.org/ 10.1016/j.iref. 2020.09.016

Zhou, J. H., Fei, H. A. N., Kai, L. I., & Yu, W. A. N. G. (2020). Vegetable production under COVID-19 pandemic in China: An analysis based on the data of 526 households. *Journal of Integrative Agriculture*, *19*(12), 2854-2865.

Zhou, J., Shafique, M. N., Adeel, A., Nawaz, S., & Kumar, P. (2017). What is theoretical contribution? a narrative review. *Sarhad Journal of Management Sciences*, *3*(02), 261-271.

Žunić, A., Kozarić, Kemal, E., & Dželihodžić, Ž. (2021). Non-Performing Loan Determinants and Impact of COVID-19: Case of Bosnia and Herzegovina. *Journal of Central Banking Theory and Practice, 2021*(3), 5-22.